

## ABSTRACT

A modulation control system is used in fiber optic data transmission and fiber optic test equipment. A modulation controller includes a plurality of function generators that are linked by a switching mechanics, to a rail system that drives a plurality of laser source cards. The switching mechanism for each rail is capable of driving the rail at the function-generated waveform or switching to an external source waveform. The laser source cards are intelligent in the sense that they can be programmably controlled by switching to select waveforms from a selected one of the rails.